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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/050,309	01/16/2002	Joshua M. Cobb	83866NAB	8719

7590

03/26/2004

Milton S. Sales
Patent Legal Staff
Eastman Kodak Company
343 State Street
Rochester, NY 14650-2201

EXAMINER

SEVER, ANDREW T

ART UNIT	PAPER NUMBER
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2851

DATE MAILED: 03/26/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/050,309	COBB, JOSHUA M.	
	Examiner	Art Unit	
	Andrew T Sever	2851	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 March 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9, 11-27, 29-48, 50-72 and 75 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-9, 11-27, 29-48, 50-72 and 75 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 04 June 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. The finality of the rejection of the last Office action is withdrawn.
2. The indicated allowability of claim 1-9, 11-27, 29-48, 61-72, and 75 is withdrawn in view of the newly discovered reference(s) to Shimonura et al. (US 6,141,151) and Cobb (US 6,676,260 and application number 10/237,516). Rejections based on the newly cited reference(s) follow.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claim 75 is rejected under 35 U.S.C. 103(a) as being unpatentable over Mihara (US 6,517,211) and further in view of Shimonura et al. (US 6,131,151).

Mihara teaches in figure 1 a projection apparatus comprising:

A first light source which produces light having a first wavelength (206g);

A first spatial light modulator for modulating incident light from said first light source to form a first image (201g);

A first lens (203g);

Art Unit: 2851

A second light source which produces light having a second wavelength (206b);

A second spatial light modulator for modulating incident light from said second light source to form a second image (201b);

A second lens (203b);

A third light source having a third wavelength (206r);

A third spatial light modulator for modulating incident light from is a second light source to form a third image (201r);

A third lens (203r);

A dichroic combiner which forms multicolor images by combining said first, second, and third images from said first, second, and third lenses (101); and

A projection lens for projecting said multicolor image (100).

Mihara does not necessarily teach that the lenses are double-telecentric magnifying lenses, however such lenses are well known as taught by Shimonura et al. Shimonura teaches in figure 12 a projection apparatus, which includes a double-telecentric relay lens (see abstract). Shimonura further teaches that the lenses are magnifying lenses (see columns 31 and 32 starting at line 50.) Shimonura teaches in column 30 lines 3-13 that it is beneficial to use a magnifying relay lens, as the size of the integrator does not have to be changed according to the size of the light modulator. Given the light integrator of Mihara (kaleidoscope) is not a standard light integrator and therefore it is useful for one of ordinary skill in the art using it in a projector to not have to resize it when using a different size light modulator, it would have been obvious to one of ordinary skill in the

Art Unit: 2851

art at the time the invention was made to use the magnifying relay lenses taught by Shimonura in the projection apparatus taught by Mihara.

Double Patenting

5. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

6. Claims 1-9, 11-27, 29-48, 50-72, and 75 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-74 of U.S. Patent No. 6,676,260 (to Cobb et al.). Although the conflicting claims are not identical, they are not patentably distinct from each other because:

The subject matter of independent claims 1, 22, 39, 56, 61, and 75 are contained in the claimed subject matter of claims 1, 45, 63, 23, 23, and 13 respectively of the '260 patent. Although the claims are not identical the claim subject matter is the same. For example claim 1 of the present application differs from claim 1 of the '260 patent in that the '260 patent claim 1 does not individually describe each modulation assembly, but rather describes one and did say its duplicated for three different wavelengths. Claim 22 of the

present application differs from claim 45 of the '260 patent in that claim 45 of the '260 patent does not claim the specific order of the components (that for example the light source directs the light towards the polarizing beamsplitter), however the claim order of the components is well known and obvious. Claim 39 of the present application only differs from claim 63 of the '260 patent in the specific wording and is largely a duplicate. Claims 56 and 61 of the present application differ from claim 23 of the '260 patent in that claim 23 of the '260 patent does not claim the light source in the same order or individually as claimed in the present application (like claim 1 one example is described and then extended to all three colors). Claim 75 corresponds to claim 13 of the '260 patent which is dependent on claim 1 of the '260 patent together they claim all the subject matter of claim 75.

Dependent claims 2-9, 11-13, 16, 17, 19-21, 23-27, 29-31, 34, 36-38, 40-44, 48, 50-55, 59, 60, 62-67, 68, 71, and 72 correspond to claims 2-9, 11-13, 14, 16, 17-19, 46-50, 52-54, 55, 56-58, 64-68, 69, 25-31, 40, 41, 25-31, 34, 40, and 41 respectively of the '260 patent and use identical language in the dependent claim (see above for their independent claims.)

The subject matter of the present application's claims 18, 35, 45 is contained in the corresponding independent claims of the '260 patent (1, 45, and 63 respectively).

Art Unit: 2851

The present application's claims 14, 15, 32, 33, 46, 47, 57, 58, 69, 70 claim either X-cube or Philips prism type dichroic combiners, both of which are well known dichroic combiners as evidenced by Shimonura et al. (US 6,141,151) which teaches an X-cube dichroic combiner, and US 6,672,721 to Aastuen which teaches an X cube combiner in figure 9 and further teaches the use of a Philips prism in figures 4 and 6 (see column 9 lines 1-15 for example.)

It should be noted the above claim correspondences are only examples, other combinations are equally applicable.

Response to Arguments

7. Applicant's arguments with respect to claims 1-9, 11-27, 29-48, 50-72, and 75 have been considered but are moot in view of the new ground(s) of rejection.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andrew T Sever whose telephone number is 571-272-2128. The examiner can normally be reached on 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Russell Adams can be reached on 571-272-2112. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 2851

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

AS


RUSSELL ADAMS
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2800